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ABSTRACT

An instructional methods survey of full-time faculty at five midwestern colleges and universities was conducted during the fall of 1978 in an effort to provide both a description of current instructional practices and an historical perspective on their development over the last quarter century. The survey consists of a list of 42 method items including teaching methods, standards for evaluation of student performance, and 15 types of tasks. Results concerning methods of teaching and grading used by approximately 1,000 faculty are discussed in the context of institutional and disciplinary perspectives and are compared to the results of a similar survey of midwestern and southwestern institutions published in 1954. Results indicate that institutional size is not related to the rank order or frequency of use of the different teaching and grading methods. However, disciplinary affiliation was moderately influential on order and frequency of use of instructional practices. Discipline-associated trends involving the sciences and education faculty are discussed. Relationships between teaching methods and evaluation standards are also described. The most frequently used teaching methods in the current survey were similar to those indicated in the results of the 1954 survey. A comparative analysis of results from these two surveys is included. The survey methodology, results, and questionnaire are appended. (SF)

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Changes in Colleges and University Instructional Practices, 1954-1979

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Improvement of undergraduate education is a major theme of higher education in the United States in the 1970s. This emphasis has evolved in concert with a variety of changes in higher education here during the last ten to fifteen years. Declining enrollments, financial pressures, public demands for accountability, and faculty concern for growth in a time of retrenchment all support an emphasis on instructional development. Changes in the composition of the student body have led to concern for the types of educational opportunities available to all who wish to enroll. Significant development in instructional theory and technology during the 1960s and 70s is also evident on campuses today and has been described by Cross in 1976 as an "Instructional Revolution." Given these changes in higher education during the last two decades, it seems reasonable to expect some differences in the way students are currently taught as compared to how they have been taught in the past.

Accordingly, an instructional methods survey of the entire faculties of five midwestern colleges and universities was conducted during the fall, 1978. The survey consists of a comprehensive list of 42 teaching and grading methods to which faculty responded by identifying their degree of actual and projected ideal use. Results concerning methods of teaching and grading used by about 1,000 faculty are discussed in the context of institutional and disciplinary perspectives and compared to the results of a similar survey of midwestern and southwestern institutions published in 1954 by Umstattd. Trends in the implementation of methods based on advances in educational theory and technology and responsive to changes in higher education are emphasized.

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A COMPARISON OF INSTRUCTIONAL METHODS USED IN COLLEGES AND UNIVERSITIES, 1954-1979

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The Improvement of undergraduate education is a major theme of postsecondary education in the 1970s. Research and program development in the areas, for example, of classroom teaching, faculty development, student consumerism, and institutional accountability each reflect this theme and share a concern for optimizing the student learning experience. This emphasis has evolved in concert with a variety of changes in higher education during the last ten to fifteen years.

Declining enrollments, financial pressures, public demands for accountability, and professional concern for growth in a time of retrenchment all support an emphasis on instructional development. Recognition of students as a major force creating instructional change and of the changing composition of the student body (i.e., increased numbers of students previously underrepresented in higher education--adults, ethnic minorities, women, lower SES and part-time students) has led to a growing concern over the type of educational opportunities available to all who wish to enroll in postsecondary institutions. Moreover, the students of the 1970s are becoming increasingly vocal in their demands for an active role in the educational process. A thrust toward innovation and experimentation in college teaching, especially involving those instructional models facilitating individualization or emphasizing the student as an active learner, is an evident response to these new students.

Significant development in instructional theory and technology during the 1960s and 1970s is also evident on campuses today and has been aptly described by K. P. Cross (1976) as an "Instructional Revolution." Vast claims for the potential benefits of instructional media, particularly television, were characteristic of the 1960s and can be seen to have matured in programs like the University of the Midlands and various closed-circuit and cassette-based systems. Similarly, the research of operant psychologists and systems analysts made possible computer-based auto-instructional systems, such as PLATO, which share their developmental history with other individualized instructional systems such as the Keller Plan. This emphasis on individualization is also reflected today in the growing body of literature and programs concerned with matching student learning styles to specific teaching methods. Emphasis on students as active participants in the learning process continues a trend reported by Umstattd (1954), most clearly represented today in instructional strategies such as discovery learning and field-based practica.

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Given the changes described above, it seems reasonable to expect differences between how students are currently taught and how they have been taught in the past. The present investigation, a corollary to the University of Nebraska FIPSE project "Helping Students Become More Sophisticated Consumers of Their Own Education" surveys faculty regarding their use of various types of instructional and their satisfaction with current practices to provide both a description of instrumental practices today and a historical perspective on development over the last quarter century.

Procedure and Sample

In October, 1978, an Instructional Methods Survey was administered to all full-time faculty at five midwestern postsecondary institutions: one private college (student population 900), two state colleges (2000; 6,000), and two campuses of a state university (15,000; 22,000). The survey consists of demographic information and a list of 42 method items divided in three parts--24 teaching methods, three types of standards for evaluation of student performance, and 15 types of tasks evaluated. Brief descriptions of each method are provided. Faculty were requested to rate each method first according to how much they typically use it, limiting their evaluation to undergraduate education at their institution during the last four years, and then according to how much they would ideally use it, each on a five-point Likert-type scale (never, rarely, occasionally, frequently, almost always). Survey constructions involved an update and elaboration of the instrument developed by Umstattd (1954). The survey was administered by the local Teaching and Learning Centers and introduced by a cover letter from the local administrative officer for academic affairs.

A total of 970 useable surveys were returned, representing an average institutional response rate of 56 percent, similar to that obtained by Umstattd (1954). Sample characteristics are elaborated in the technical appendix, available upon request.

Results

The discussion below presents an overview of the findings. Complete data summary tables and statistical analyses are available upon request.

Actual and Ideal Use of Instructional Methods. Table 1 presents the results for the total sample. Item response rates were greater than 89 percent for all but one poorly written item (#6) which was omitted from further analysis. The right columns of Table 1 presents the rank orders based on item medians for each part of the survey. All methods were used by some faculty.

Test-retest reliabilities conducted over a two-week period for a heterogeneous group of faculty at a large southwestern university ranged from .60 to .90, Mdn. = .79. The rank order correlation between faculty and student typical ratings of teaching

items is .87, $p < .01$, for all faculty and a ten-percent random sample of students who completed the survey, substantiating the validity of the faculty self-reports of actual teaching practice. The faculty-student correlation for ideal teaching practices was lower.

The most frequently used teaching methods are the traditional ones of formal and informal lecture, discussion, laboratory, audio-visual aids, and tutorial, each used at least occasionally by 50 percent or more of all faculty. The least frequently used methods are those which require machine assistance (i.e., CAI, CMI, television) or special materials for individualizing instruction (i.e. Keller Plan, auto-tutorial, individually prescribed instruction. These methods are used occasionally by fewer than 12 percent of all faculty.

The relationship between frequency of actual and ideal use of teaching methods is high, rho (item ranks) = .91, $p < .01$, suggesting that the faculty as a group are satisfied with their relative use of various teaching methods. They would like, however, to use formal lecture less often, to continue to use informal lecture as they have, and to increase their use of all other teaching methods. The methods which show the greatest discrepancy between actual and ideal use are those which emphasize learning by experience (i.e., field or experiential learning, discovery/inquiry, simulation/gaming, field trips) or which permit individualization of instruction (i.e., individually prescribed instruction, contingency contracting, CAI, CMI, auto-tutorial).

When faculty evaluate the quality of student performance, they most frequently employ absolute standards of judgment and less frequently employ criterion- or norm-referenced standards. Ideally, faculty would continue to use absolute and norm-referenced standards with the same frequencies but would increase use of criterion-referenced standards to almost the same level as absolute standards. The types of student task performance most frequently evaluated are short essays, term papers, problems and multiple-choice exams. Ideally, faculty would decrease their use of multiple-choice exams and increase use of all other tasks.

Institutional and Disciplinary Perspectives. Three types of comparative data analyses were used to evaluate the impact of school size and discipline on choice of instructional practices: (1) rank orders of actual and ideal teaching and grading methods were compared across institutions, disciplines, and disciplines within schools using Kendall's coefficient of concordance; (2) extent of use of teaching and of grading methods was evaluated using repeated measures ANOVAs (Institution X Discipline X Items X Typical-Ideal), and (3) number of teaching methods used at least occasionally as a measure of breadth of teaching repertoire was compared across institutions and disciplines using ANOVA.

The concordances and repeated measures ANOVAs indicated that institutional size was not related to the rank order or frequency of use of the different actual or ideal teaching and grading methods ($.76 \leq \omega \leq .97$, Mdn.ω = .91) but that disciplinary affiliation was moderately influential on order and frequency of use of instructional practices ($.48 \leq \omega \leq .82$, Mdn.ω = .60). Table 2 presents the means of the typical use ratings for the teaching method and grading standards items for all disciplines. Rank orders of actual and ideal ratings were strongly correlated for each discipline (rho's $\geq .88$).

The means show that the science-oriented disciplines of natural science, medical/professional, agriculture, and engineering are similar in their frequent use of formal lecture and laboratory and infrequent use of discussion methods as compared to other disciplines. Natural Science faculty also use guest instructors, independent study, role-play, simulation/gaming, and experiential learning less frequently than do faculty in other disciplines. Medical/professional faculty are high relative to others in the use of experiential learning, auto-tutorial, and television for instruction.

Education faculty report more frequent use of experiential learning, peer-assisted instruction, discovery/inquiry, simulation/gaming, role-play, and individually prescribed instruction, and less frequent use of formal lecture, than faculty in other disciplines. Humanities faculty also report only infrequent use of formal lecture methods. The social science and business faculty report less use of audio-visual aids, laboratory, and field-trip methods than other faculty, although business faculty, like those in education, also use more simulation/gaming than other disciplines.

All faculty report high frequency of use of absolute standards for grading. Faculty in education report more frequent use of criterion-referenced and less frequent use of norm-referenced and absolute standards of grading than do faculty in other disciplines. Medical/professional faculty are also higher than others in their use of criterion-referenced grading. Humanities faculty are relatively high in their frequency of use of absolute and relatively low in their use of norm-referenced standards as compared to other faculty.

When teaching methods are grouped according to the type of instructional model which they represent and ANOVA comparisons over disciplines are made, the results show that faculty in education, home economics, and the medical/professional field use experiential (Items #4, 5, 12, 13, 19, 20), interpersonal (#3, 9, 12, 20) and media based (#11, 21, 22, 23, 24) types of instruction more frequently than do faculty in other disciplines. Education faculty also use individualized (#8, 10, 14, 15, 16, 17, 18, 21, 22, 23) and specifically operant (#14, 15, 16, 17) forms of

instruction more frequently than other faculty. Faculty in natural science, engineering, and agriculture use interpersonal forms of instruction less frequently and faculty in business use individualized forms of instruction somewhat less frequently than do other faculty.

The ANOVAs on breadth of teaching repertoire indicated that school size was not related to size of actual repertoire but was related to size of ideal repertoire, faculty at smaller schools desiring larger teaching repertoires than those at larger schools where the faculty may be able to teach a more specialized set of courses. The effect of discipline on size of teaching repertoire was similar for actual and ideal repertoires and essentially ordinal for the five schools. Table 3 presents the means for the six disciplines taught at all five schools. Clearly, faculty in all disciplines would like to increase their teaching repertoires but those in education and home economics use larger repertoires and would like to have even larger repertoires than those in other fields.

When size of teaching repertoire is compared using ANOVA for faculty who vary in rank, tenure status, proportion of time spent teaching undergraduate classes, age, or average number of students taught per semester, only the last two variables are related to size of actual teaching repertoire. Actual teaching repertoire increases with the age of the instructor and decreases as the number of students taught increases. It is reassuring that age, to the extent that it serves as an indicator of teaching experience, is related to the size of one's pedagogical repertoire and it is understandable that faculty who teach large numbers of students are more limited in the methods they can employ than those who teach fewer students. There is some overlap between discipline and these faculty characteristics. Education and home economics faculty are as a group somewhat older than other faculty and natural science and business faculty teach somewhat greater numbers of students than other faculty. This overlap may be related in part to the disciplinary differences described above. Faculty characteristics other than school and discipline are not related to size of ideal teaching repertoire.

Evaluation Standards and Teaching Methods. About two-thirds of the faculty can be identified as using either absolute, norm- or criterion-referenced evaluation standards frequently or almost always and the other two types of standards no more than occasionally. By this criterion, 336 faculty use absolute, 135 use criterion-referenced, and 116 use norm-referenced standards relatively frequently. Comparisons of these groups' actual use of teaching methods using ANOVA showed that those who use criterion-referenced standards use formal lecture less frequently, informal lecture similarly, and all other teaching methods more frequently than do the other two groups whose use of teaching methods are very similar. Thus, faculty who use

criterion-referenced standards may be called innovators in that they use a wider range of teaching methods more frequently than do faculty using the more traditional evaluation standards. Chi-square analyses relating faculty characteristics to the typology above show that the faculty using traditional standards tend to teach greater numbers of students each semester, to spend more of their time involved in undergraduate education, to teach at larger schools, and to be male than the innovators.

Changes in Instructional Practices Since 1954. Umstattd (1954) reported that in his survey of teaching methods at 28 institutions, the most frequently used methods from a list of 27 were, from high to low, informal lecture, discussion, examinations, laboratory, anecdote, demonstration, visual aids, coaching, student reports, and formal lecture. He reported few differences between types of institutions or upper and lower division courses. Disciplinary differences were evident and similar in many respects to those found today. He reported that grading practices were often subjective and based most frequently on examinations, class discussions, and reports. He also noted that faculty reports of changes in teaching practices over the previous five years represented "movement . . . from the teacher-dominated classroom, symbolized by formal lecture, and towards procedures which permit student reaction and participation," (pg. 54) primarily informal lecture and discussion.

The most frequently used teaching methods in the current survey are similar to those in 1954. Indeed, formal lecture ranks higher today than it did then. Some historical perspectives are helpful in understanding this similarity and some of the differences as well. The 1940s, like the 1960s, were a period of rapid growth in higher education. In the '40s, colleges responded to their influx of "new" students by becoming somewhat more student centered. The technology of the '60s promised the possibility of a different kind of response, through computerized or programmed individualization of instruction and through television reaching many students. Those promises were not the panaceas promised. They could teach but they were expensive and to some, dehumanizing. Student concern in the 1960s for personal relevance in education facilitated the continued growth of interpersonal learning modes. The slowed growth rate of the 1970s, the entry of a new group of "nontraditional" students, and the move from personal to career relevance in education have fostered a recent surge in experiential modes of learning as well as some debate over the advantages of individualizing instruction, especially at remedial levels, as compared to using more stringent criteria to select and to grade students so that dwindling dollars may be used efficiently to maintain quality education. Grade inflation and career education are issues of the late 1970s rather than open admissions and personal growth. With the relative decrease in resources,

concern for improved teaching and learning is another major theme today, both for its intrinsic value, as well as its implications for cost-efficiency.

How have these trends effected teaching today? Advances are seen in four areas. First, audio-visual aids today are much more sophisticated than in the 1940s and rank higher among teaching methods used in 1978 than in 1948. Secondly, experiential modes of learning are ranked in the middle third of the methods used today, whereas the few such methods listed by Umstattd, other than laboratory, were rarely used. Third, the many types of individualized instruction, especially those derived from the principles of operant learning, are used in 1978 by some faculty in all disciplines. They are not a dominant mode of instruction but they were essentially nonexistant except for independent study and tutorials in 1954. Fourth, the majority of teaching methods included in this survey, all of which were used by some faculty, involve the student as an active learner, reflecting a significant increase in instructional modes which view the student as participant rather than passive learner. Furthermore, faculty dissatisfaction is directed towards reducing passive (formal-lecture) and increasing active (experiential and operant individualized) modes of learning.

Similarities persist, however, in the use of traditional teaching methods and evaluation criteria. These are the methods by which the faculty themselves were taught and they have only recently been invited on a moderate scale by faculty development programs to expand their teaching repertoires. Faculty appear interested in doing so but further change may be inhibited by tradition, faculty conservatism and satisfaction, and concern for efficiency. Change may also be inhibited by concern for maintaining high standards and the relative ease and low cost of doing so by selection of students rather than by adaptation of instruction.

References

Cross, K. P. The Instructional Revolution. Invited Address, AAHE, Chicago, March, 1976

Fund for the Improvement of Postsecondary Education. Resources for Change, A Guide to Projects, United States Government Printing Office, 1976, 1977.

Umstattd, J. G. Teaching Procedures used in Twenty-eight Midwestern and Southwestern Colleges and Universities, University Cooperative Society, Inc., Austin, Texas, 1954.

Table 1

INSTRUCTIONAL METHODS SURVEY (N=970)*

ITEMS	TYPICAL USAGE			IDEAL USAGE		
I. Instructional Methods	Mean	Median	Rank by Median	Mean	Median	Rank by Median
1. Formal lect.	3.01	3.00	4.00	2.79	2.80	10.00
2. Informal lect.	3.80	3.67	1.00	3.86	3.90	1.00
3. Discussion	3.14	3.18	3.00	3.49	3.59	2.00
4. Laboratory	2.90	2.96	5.00	3.00	3.48	4.00
5. Field trip	1.94	1.84	12.00	2.62	2.70	12.00
6. Dir. conv. method	1.97	1.30	0.0	2.31	1.49	0.0
7. Guest Instruc.	2.34	2.30	8.00	2.82	2.86	9.00
8. Tutorials	2.63	2.64	7.00	3.03	3.06	7.00
9. Peer-ass't. instr.	2.25	2.18	11.00	2.72	2.79	11.00
10. Indep. Study	2.84	2.89	6.00	3.11	3.12	5.00
11. Audio-vis. aids	3.24	3.25	2.00	3.54	3.58	3.00
12. Role-playing	1.71	1.45	14.00	2.14	2.11	19.00
13. Simul./gaming	1.84	1.50	13.00	2.40	2.46	14.00
14. Conting. contr.	1.63	1.26	16.00	2.21	2.05	20.00
15. Programmed instr.	1.53	1.27	15.00	2.26	2.23	15.00
16. Modular instr.	1.55	1.25	17.00	2.27	2.22	16.00
17. Keller Plan	1.32	1.12	21.00	2.08	1.95	23.00
18. Ind. presc. inst.	1.42	1.20	20.00	2.48	2.55	13.00
19. Disc./inq. learned	2.25	2.20	10.00	2.91	3.00	8.00
20. Field or exp. lrng.	2.36	2.21	9.00	3.00	3.08	6.00
21. Auto-tutorial	1.49	1.24	18.00	2.24	2.20	17.00
22. Comp.-mngd. instr.	1.11	1.05	23.00	2.05	1.96	22.00
23. Comp.-ass't. inst.	1.18	1.08	22.00	2.18	2.15	18.00
24. Television	1.42	1.23	19.00	2.05	2.01	21.00
II. Grading Methods						
A. Standards for Evaluation						
25. Absolute standards	3.47	3.79	1.00	3.44	3.67	1.00
26. Norm.-ref. grading	2.34	2.10	3.00	2.37	2.22	3.00
27. Crit.-ref. grading	2.77	2.78	2.00	3.36	3.47	2.00
B. Tasks to be Evaluated						
28. Multi. choice exams	2.85	2.97	4.00	2.79	2.86	7.00
29. Fill-in-blank exams	2.25	2.11	8.00	2.41	2.43	8.00
30. Recognition exams	1.71	1.36	13.00	2.21	2.22	12.00
31. Short essay exams	3.28	3.42	1.00	3.43	3.53	1.00
32. Long essay exams	2.56	2.50	7.00	2.87	2.91	6.00
33. Book reports	2.02	1.79	10.00	2.35	2.33	9.00
34. Term or res. papers	3.08	3.16	2.00	3.29	3.32	3.00
35. Public performances	1.67	1.27	15.00	2.11	1.90	14.00
36. Class presentations	2.77	2.81	5.00	3.04	3.06	5.00
37. Oral exams	1.74	1.56	11.00	2.26	2.22	13.00
38. Discussion	2.77	2.81	6.00	3.03	3.07	4.00
39. Attendance	2.34	2.07	9.00	2.43	2.24	11.00
40. Lab reports	2.01	1.41	12.00	2.33	2.26	10.00
41. Journals	1.67	1.29	14.00	2.08	1.89	15.00
42. Problems	3.01	3.04	3.00	3.30	3.32	2.00

* 1 = never, 2 = rarely, 3 = occasionally, 4 = frequently, 5 = almost always.

Table 2

"TYPICAL" Item Means by Discipline*

Item	Soc.Sci.	Hum.	Bus.	Educ.	Home Ec.	Nat.Sci.	Med./Prof.	Ag.	Eng.
	Discipline								
1. Formal lect.	2.99	2.72	3.11.	3.14	3.14	3.50	3.20	3.46	3.45
2. Inf. lect.	3.98	3.84	3.86	3.79	4.00	3.70	3.86	3.55	3.60
3. Disc.	3.06	3.45	2.99	3.49	3.53	2.51	2.95	2.58	2.69
4. Lab.	2.05	2.75	2.02	3.18	3.50	3.53	3.77	3.37	3.37
5. Field trip	1.69	1.79	1.57	2.29	2.48	1.98	1.86	2.43	2.00
7. Guest inst.	2.50	2.25	2.07	2.62	2.89	1.89	2.67	2.49	2.09
8. Tutorial	2.18	2.92	2.38	2.57	2.62	2.82	2.62	2.37	2.52
9. Peer ass't.	1.95	2.23	1.90	2.80	2.37	1.95	2.24	2.10	2.25
10. Ind. study	3.07	2.88	2.68	3.03	2.95	2.61	2.86	2.75	2.77
11. A-V	2.88	3.17	2.85	3.52	3.50	3.27	3.96	3.75	3.19
12. Role-play	1.74	1.67	1.58	2.19	1.75	1.17	1.85	1.19	1.15
13. Sim./gam.	1.68	1.68	2.20	2.20	1.73	1.40	1.90	1.88	1.89
14. Conting.C.	1.54	1.60	1.41	2.00	1.49	1.34	1.34	1.43	1.49
15. P.I.	1.32	1.54	1.31	1.73	1.73	1.44	1.58	1.32	1.43
16. Mod. inst.	1.33	1.51	1.33	1.99	1.48	1.45	1.39	1.23	1.40
17. Keller	1.31	1.32	1.14	1.41	1.28	1.28	1.10	1.25	1.11
18. Ind.pres.	1.26	1.50	1.11	1.64	1.46	1.27	1.39	1.34	1.33
19. Disc./Inq.	2.18	2.24	2.19	2.40	2.31	2.29	2.45	1.79	2.22
20. Field/exp.	2.16	2.10	2.08	3.04	3.25	1.82	3.91	2.22	1.82
21. Auto-tut.	1.26	1.36	1.25	1.69	1.49	1.53	2.05	1.47	1.36
22. CMI	1.10	1.02	1.07	1.09	1.29	1.10	1.34	1.13	1.09
23. CAI	1.13	1.13	1.25	1.11	1.49	1.18	1.24	1.28	1.19
24. TV	1.39	1.41	1.23	1.62	1.38	1.30	1.72	1.07	1.09
25. ABS.	3.41	3.67	3.64	3.13	3.39	3.49	3.48	3.61	3.63
26. NORM	2.59	2.11	2.39	2.01	2.46	2.73	2.34	2.00	2.90
27. CRIT.	2.10	2.97	2.29	3.40	2.95	2.32	3.72	2.76	2.36
N	98	218	85	165	36	149	21	33	38

* 1 = never, 2 = rarely, 3 = occasionally, 4 = frequently, 5 = almost always.

Table 3

Mean Size of Teaching Repertoire by Discipline

Rating	Discipline					
	Home Ec.	Educ.	Hum.	Soc.Sci.	Nat.Sci.	Bus.
Actual	9.97	9.92	7.83	7.32	6.81	6.57
Ideal	14.51	14.96	11.39	12.83	11.86	11.39

INSTRUCTIONAL METHODS SURVEY

TECHNICAL APPENDIX

I. Faculty Survey

A. Sample Sizes and Return Rates

B. Test-retest Reliability

C. Item Frequency Distributions, Means, Medians, and Ranks

D. Kendall's Coefficients of Concordance across Schools, Disciplines, and Disciplines Within Schools

E. Rank-order Correlations for Faculty Typical and Ideal Ratings

F. Repeated-Measures ANOVAs

G. MEANS: Instructional Models

H. ANOVAs and Means: Size of Teaching Methods Repertoire

I. Size of Teaching Repertoire and Faculty Characteristics

J. ANOVA: Type of Grading Standards Used

K. Types of Grading Standard Used and Faculty Characteristics

L. Umstaadt's Survey Items and Results

A. Sample Sizes and Return Rates

Institution	Faculty* Number Returned	Faculty* Percentage Returned
University of Nebraska-Lincoln	438	41
Universtiy of Nebraska at Omaha	287	73
Kearney State College	124	55
Chadron State College	61	55
Union College	37	59
Not Identified	23	
Total	970	

* Faculty survey sent by local Teaching and Learning Centers to all full-time faculty.

B. Test-retest Reliability

The IMS was administered to a heterogeneous sample of faculty at the University of Texas in Austin. The test-retest reliabilities of the item medians based on the responses of these faculty over a ten-day interval are below.

		Typical Ratings	Ideal Ratings
I:	Teaching Methods	.92	.86
IIA:	Grading Standards	.83	.99
IIB:	Graded Tasks:	.90	.89

C. Item Frequency Distributions, Means, Medians, and Ranks

Note: Computer print-outs for each school separately, for each of the ten disciplines in which faculty teach (item #53) summed over schools, and for the disciplines within schools are available upon request.

ALL SCHOOLS TOGETHER
FACULTY

INSTRUCTIONAL METHODS SURVEY

TYPICAL USAGE FREQUENCY DISTRIBUTION (COUNT / %)

ITEMS	NEVER		RARELY		OCCASIONALLY		FREQUENTLY		ALMOST ALWAYS		NO RESPONSE		MEAN	MEDIAN	RANK BY MEDIAN
INSTRUCTIONAL METHODS															
1 FORMAL LECTURE	84	8.7	247	25.5	294	30.3	236	24.3	94	9.7	15	1.5	3.01	3.00	4.00
2 INFORMAL LECTURE	4	0.4	48	4.9	251	25.9	491	50.6	166	17.1	10	1.0	3.80	3.87	1.00
3 DISCUSSION	38	3.9	201	20.7	355	36.6	317	32.7	46	4.7	13	1.3	3.14	3.16	3.00
4 LABORATORY	213	22.0	179	18.5	173	17.8	241	24.8	134	13.8	30	3.1	2.90	2.96	5.00
5 FIELD TRIP	353	36.4	358	36.9	188	19.4	34	3.5	13	1.3	24	2.5	1.94	1.84	12.00
6 DIRECT CONVERSATIONAL METHOD	213	22.0	25	2.6	33	3.4	31	3.2	35	3.6	633	65.3	1.97	1.30	0.0
7 GUEST INSTRUCTORS	152	15.7	409	42.2	319	32.9	68	7.0	6	0.6	16	1.6	2.34	2.30	5.00
8 TUTORIALS	126	13.0	301	31.0	349	36.0	152	15.7	23	2.4	19	2.0	2.63	2.64	7.00
9 PEER-ASSISTED INSTRUCTION	290	29.9	274	28.2	263	27.1	113	11.6	11	1.1	19	2.0	2.25	2.18	11.00
10 INDEPENDENT STUDY	115	11.9	219	22.6	374	38.6	207	21.3	40	4.1	15	1.5	2.84	2.89	6.00
11 AUDIO-VISUAL AIDS	52	5.4	160	16.5	355	36.6	284	29.3	104	10.7	15	1.5	3.24	3.25	2.00
12 ROLE-PLAYING	496	51.1	274	28.2	128	13.2	38	3.9	4	0.4	30	3.1	1.71	1.45	14.00
13 SIMULATION/GAMING	475	49.0	229	23.6	169	17.4	55	5.7	13	1.3	29	3.0	1.84	1.50	13.00
14 CONTINGENCY CONTRACTING	626	64.5	161	16.6	87	9.0	37	3.8	36	3.7	23	2.4	1.63	1.26	16.00
15 PROGRAMMED INSTRUCTION	623	64.2	207	21.3	76	7.8	28	2.9	14	1.4	22	2.3	1.53	1.27	15.00
16 MODULAR INSTRUCTION	634	65.4	172	17.7	82	8.5	45	4.6	12	1.2	25	2.6	1.55	1.25	17.00
17 KELLER PLAN	774	79.8	95	9.8	37	3.8	29	3.0	10	1.0	25	2.6	1.32	1.12	21.00
18 INDIVIDUALLY PRESCRIBED INSTRUCTION	665	68.6	172	17.7	65	6.7	13	1.3	10	1.0	45	4.6	1.42	1.20	20.00
19 DISCOVERY/INQUIRY LEARNED	291	30.0	246	25.4	279	28.8	90	9.3	20	2.1	44	4.5	2.25	2.20	10.00
20 FIELD OR EXPERIENTIAL LEARNING	309	31.9	212	21.9	209	21.5	133	13.7	54	5.6	53	5.5	2.36	2.21	9.00
21 AUTO-TUTORIAL	622	64.1	180	18.6	77	7.9	21	2.2	10	1.0	60	6.2	1.49	1.24	18.00
22 COMPUTER-MANAGED INSTRUCTION	841	86.7	60	6.2	11	1.1	1	0.1	2	0.2	55	5.7	1.11	1.05	23.00
23 COMPUTER-ASSISTED INSTRUCTION	800	82.5	80	8.2	25	2.6	9	0.9	1	0.1	55	5.7	1.18	1.08	22.00
24 TELEVISION	637	65.7	192	19.8	81	8.4	7	0.7	1	0.1	52	5.4	1.42	1.23	19.00
GRADING METHODS A. STANDARDS FOR EVALUATION															
25 ABSOLUTE STANDARDS	125	12.9	118	12.2	135	13.9	304	31.3	246	25.4	42	4.3	3.47	3.79	1.00
26 NORM-REFERENCED GRADING	354	36.5	180	18.6	179	18.5	144	14.8	66	6.8	47	4.8	2.34	2.10	3.00
27 CRITERION-REFERENCED GRADING	244	25.2	161	16.6	190	19.6	212	21.9	109	11.2	54	5.6	2.77	2.73	2.00
GRADING METHODS B. TASKS TO BE EVALUATED															
28 MULTIPLE CHOICE EXAMS	222	22.9	156	16.1	190	19.6	272	28.0	92	9.5	38	3.9	2.85	2.97	4.00
29 FILL-IN-THE-BLANK EXAMS	323	33.3	235	24.2	216	22.3	134	13.8	22	2.3	40	4.1	2.25	2.11	8.00
30 RECOGNITION EXAMS	541	55.8	185	19.1	140	14.4	51	5.3	10	1.0	43	4.4	1.71	1.36	13.00
31 SHORT ESSAY EXAMS	80	8.2	108	11.1	301	31.0	359	37.0	81	8.4	41	4.2	3.28	3.42	1.00
32 LONG ESSAY EXAMS	261	26.9	206	21.2	219	22.6	176	18.1	69	7.1	39	4.0	2.56	2.59	7.00
33 BOOK REPORTS	396	40.8	225	23.2	208	21.4	71	7.3	21	2.2	49	5.1	2.02	1.79	10.00
34 TERM OR RESEARCH PAPERS	125	12.9	140	14.4	306	31.5	260	26.8	101	10.4	38	3.9	3.08	3.16	2.00
35 PUBLIC PERFORMANCES	592	61.0	135	13.9	93	9.6	57	5.9	28	2.9	65	6.7	1.67	1.27	15.00
36 CLASS PRESENTATIONS	145	14.9	212	21.9	344	35.5	168	17.3	57	5.9	44	4.5	2.77	2.81	5.00
37 ORAL EXAMS	445	45.9	318	32.8	119	12.3	35	3.6	5	0.5	48	4.9	1.74	1.56	11.00
38 DISCUSSION	201	20.7	180	18.6	261	26.9	196	20.2	83	8.6	49	5.1	2.77	2.81	6.00
39 ATTENDANCE	354	36.5	196	20.2	172	17.7	129	13.3	78	8.0	41	4.2	2.34	2.07	9.00
40 LAB REPORTS	486	50.1	116	12.0	121	12.5	105	10.8	54	5.6	88	9.1	2.01	1.41	12.00
41 JOURNALS	570	58.8	139	14.3	130	13.4	45	4.6	16	1.6	70	7.2	1.67	1.29	14.00
42 PROBLEMS	165	17.0	160	16.5	246	25.3	186	19.2	156	16.1	58	6.0	3.01	3.04	3.00

ITEMS	IDEAL USAGE: NEVER	RARELY	OCCASIONALLY	FREQUENTLY	ALMOST ALWAYS	NO RESPONSE	MEAN	MEDIAN	RANK BY MEDIAN
INSTRUCTIONAL METHODS									
1 FORMAL LECTURE	83 8.6	277 28.6	345 35.6	186 19.2	31 3.2	48 4.9	2.79	2.80	10.00
2 INFORMAL LECTURE	2 0.2	21 2.2	239 24.6	505 52.1	156 16.1	47 4.8	3.86	3.90	1.00
3 DISCUSSION	19 2.0	86 8.9	321 33.1	423 43.6	77 7.9	44 4.5	3.49	3.59	2.00
4 LABORATORY	107 11.0	105 10.8	248 25.6	303 31.2	143 14.7	64 6.6	3.30	3.48	4.00
5 FIELD TRIP	120 12.4	258 26.6	404 41.6	109 11.2	20 2.1	59 6.1	2.62	2.70	12.00
6 DIRECT CONVERSATIONAL METHOD	163 16.8	30 3.1	39 4.0	46 4.7	43 4.4	649 66.9	2.31	1.49	0.0
7 GUEST INSTRUCTORS	28 2.9	245 25.3	526 54.2	116 12.0	9 0.9	46 4.7	2.82	2.86	9.00
8 TUTORIALS	53 5.5	169 17.4	431 44.4	246 25.4	24 2.5	47 4.8	3.03	3.06	7.00
9 PEER-ASSISTED INSTRUCTION	117 12.1	239 24.6	365 37.6	183 18.9	14 1.4	52 5.4	2.72	2.79	11.00
10 INDEPENDENT STUDY	44 4.5	154 15.9	429 44.2	252 26.0	42 4.3	49 5.1	3.11	3.12	5.00
11 AUDIO-VISUAL AIDS	22 2.3	64 6.6	350 36.1	377 38.9	116 12.0	41 4.2	3.54	3.58	3.00
12 ROLE-PLAYING	285 29.4	274 28.2	284 29.3	56 5.8	3 0.3	68 7.0	2.14	2.11	19.00
13 SIMULATION/GAMING	206 21.2	253 26.1	326 33.6	98 10.1	13 1.3	74 7.6	2.40	2.46	14.00
14 CONTINGENCY CONTRACTING	315 32.5	251 25.9	218 22.5	77 7.9	42 4.3	67 6.9	2.21	2.05	20.00
15 PROGRAMMED INSTRUCTION	250 25.8	280 28.9	282 29.1	77 7.9	16 1.6	65 6.7	2.26	2.23	15.00
16 MODULAR INSTRUCTION	264 27.2	259 26.7	269 27.7	90 9.3	17 1.8	71 7.3	2.27	2.22	16.00
17 KELLER PLAN	341 35.2	242 24.9	235 24.2	62 6.4	15 1.5	75 7.7	2.08	1.95	23.00
18 INDIVIDUALLY PRESCRIBED INSTRUCTION	206 21.2	220 22.7	318 32.8	108 11.1	29 3.0	89 9.2	2.48	2.55	13.00
19 DISCOVERY/INQUIRY LEARNED	113 11.6	151 15.6	357 36.8	224 23.1	33 3.4	92 9.5	2.91	3.00	8.00
20 FIELD OR EXPERIENTIAL LEARNING	121 12.5	140 14.4	315 32.5	236 24.3	72 7.4	86 8.9	3.00	3.08	6.00
21 AUTO-TUTORIAL	237 24.4	278 28.7	268 27.6	64 6.6	14 1.4	109 11.2	2.24	2.20	17.00
22 COMPUTER-MANAGED INSTRUCTION	316 32.6	255 26.3	245 25.3	39 4.0	11 1.1	104 10.7	2.05	1.96	22.00
23 COMPUTER-ASSISTED INSTRUCTION	273 28.1	250 25.8	271 27.9	67 6.9	8 0.8	101 10.4	2.18	2.15	18.00
24 TELEVISION	290 29.9	298 30.7	266 27.4	19 2.0	8 0.8	89 9.2	2.05	2.01	21.00
GRADING METHODS A. STANDARDS FOR EVALUATION									
25 ABSOLUTE STANDARDS	96 9.9	128 13.2	179 18.5	285 29.4	211 21.8	71 7.3	3.44	3.67	1.00
26 NORM-REFERENCED GRADING	302 31.1	200 20.6	204 21.0	136 14.0	49 5.1	79 8.1	2.37	2.22	3.00
27 CRITERION-REFERENCED GRADING	90 9.3	97 10.0	262 27.0	271 27.9	159 16.4	91 9.4	3.36	3.47	2.00
GRADING METHODS B. TASKS TO BE EVALUATED									
28 MULTIPLE CHOICE EXAMS	166 17.1	183 18.9	274 28.2	220 22.7	52 5.4	75 7.7	2.79	2.86	7.00
29 FILL-IN-THE-BLANK EXAMS	220 22.7	247 25.5	290 29.9	122 12.6	16 1.6	75 7.7	2.41	2.43	8.00
30 RECOGNITION EXAMS	285 29.4	213 22.0	298 30.7	71 7.3	9 0.9	94 9.7	2.21	2.22	12.00
31 SHORT ESSAY EXAMS	40 4.1	81 8.4	316 32.6	377 38.9	81 8.4	75 7.7	3.43	3.53	1.00
32 LONG ESSAY EXAMS	150 15.5	190 19.6	268 27.6	209 21.5	81 8.4	72 7.4	2.87	2.91	6.00
33 BOOK REPORTS	223 23.0	266 27.4	292 30.1	82 8.5	23 2.4	84 8.7	2.36	2.33	9.00
34 TERM OR RESEARCH PAPERS	60 6.2	124 12.8	324 33.4	281 29.0	109 11.2	72 7.4	3.29	3.32	3.00
35 PUBLIC PERFORMANCES	362 37.3	184 19.0	219 22.6	72 7.4	31 3.2	102 10.5	2.11	1.90	14.00
36 CLASS PRESENTATIONS	78 8.0	136 14.0	419 43.2	202 20.8	61 6.3	74 7.6	3.04	3.06	5.00
37 ORAL EXAMS	194 20.0	352 36.3	281 29.0	55 5.7	10 1.0	78 8.0	2.26	2.22	13.00
38 DISCUSSION	110 11.3	173 17.8	281 29.0	233 24.0	89 9.2	84 8.7	3.03	3.07	4.00
39 ATTENDANCE	297 30.6	203 20.9	194 20.0	116 12.0	84 8.7	76 7.8	2.43	2.24	11.00
40 LAB REPORTS	340 35.1	110 11.3	232 23.9	111 11.4	54 5.6	123 12.7	2.33	2.26	10.00
41 JOURNALS	353 36.4	204 21.0	215 22.2	74 7.6	19 2.0	105 10.8	2.00	1.89	15.00
42 PROBLEMS	96 10.1	98 10.1	296 30.5	217 22.4	168 17.3	93 9.6	3.30	3.32	2.00

D. Kendall's Coefficients of Concordance Across Schools, Disciplines, and Disciplines Within Schools

ω is used as an index of the similarity of the rank orders of item medians across schools or disciplines. ω may be interpreted as the average rank order correlation across all possible pairs of rank orders ($r_{s_{av}} = \frac{K\omega - 1}{K-1}$, where K = numbers of sets of rankings). Thus, high ωs indicate that the schools or disciplines rank the items similarly and lower ωs indicate that the rank orders are dissimilar. Tests of the statistical significance of ω are described in Seigel, S. Nonparametric Statistics for the Behavioral Sciences, 1956, McGraw-Hill, pp. 235-237.

Faculty Ratings

ωs Across Schools

		Typical Ratings	Ideal Ratings
I:	Teaching Methods	.97 **	.91 **
IIA:	Grading Standards	1.00 **	.76 **
IIB:	Tasks	.90 **	.86 **

Mdn. ω = .905

** $p < .01$

ωs Across the Six Disciplines at All Schools

(Social Science, Natural Science, Humanities, Education, Home Economics, Business)

		Typical Ratings	Ideal Ratings
I:	Teaching Methods	.82 **	.62 **
IIA.	Grading Standards	.54 *	.66 *
IIB:	Tasks	.58 **	.48 **

Mdn. ω = .60

* $p < .01$
** $p < .05$

ω's Across Six Disciplines Within Schools

UN-L	I:	Teaching	.90	$(.87)^1$	**	.79	$(.79)^1$	**
	IIA:	Grading	.53	$(.63)^1$	*	.78 **	$(.78)^1$	*
	IIB:	Tasks	.74	$(.69)^1$	**	.67	$(.64)^1$	**
UNO	I:	Teaching	.89 **			.61 **		
	IIA:	Grading	.76 **			.58 *		
	IIB:	Tasks	.76 **			.47 **		
Kearney	I:	Teaching	.85 **			.74 **		
	IIA:	Grading	.58 *			.78 **		
	IIB:	Tasks	.63 **			.58 **		
Chadron	I:	Teaching	.87 **			.79 **		
	IIA:	Grading	.44			.90 **		
	IIB:	Tasks	.62 **			.75 **		
Union	I:	Teaching	.69 **			.42 *		
	IIA:	Grading	.63 *			.53 *		
	IIB:	Tasks	.44 **			.42 **		

* $p < .05$
** $p < .01$

[1] ω across ten disciplines. UN-L also has significant numbers of faculty in Agriculture, Engineering, Medical/Professional and "Other" disciplines.

E. Rank-order Correlations for Faculty Typical and Ideal Ratings*

R_s are based on typical and ideal rank orders of items based on item medians of the faculty ratings.

Rho's Across Schools

University of Nebraska-Lincoln	.92
University of Nebraska at Omaha	.94
Kearney State College	.94
Chadron State College	.91
Union College	.87

Rho's Across Disciplines

Social Science	.92
Natural Science	.96
Humanities	.88
Education	.93
Home Economics	.92
Business	.90
Agriculture	.90
Engineering	.93
Medical/Professional	.90
Other	.93

* All ps $< .001$

F. Repeated-measures ANOVAs

(1) A School (5) x Disciplines (6) x Teaching Methods Items (23) x Typical/Ideal Rating (2) ANOVA with repeated measures on the last two factors was computed to evaluate the magnitude of differences to which the nonparametric concordances are not sensitive. A lease-squares solution was chosen as appropriate for the unequal n situation. Ns are representative of school size and discipline distributions. Given the great power of the within subjects F tests associated with large N, conservative Geisser-Greenhouse F tests (extreme Box correction) were calculated as well. Analysis of the relative sizes of the variance components and ω^2's lead to the same conclusions as the conservative F tests--all effects involving Schools x Items are not statistically significant and small relative to those involving Disciplines x Items. See Dodd, D.M. and Schultz, Jr., R.F. Computational procedures for estimating magnitude of effect for some analysis of variance designs. Psych. Bull., 1973, 79 (6), 391-395, for a discussion of the underestimation of proportions of variance in repeated-measures designs. The author is indebted to Dr. B. Plake, UN-L and Dr. L. Braskamp, University of Illinois, for their advice concerning this parametric analysis. Discussion supporting the parametric analysis of data which may not regorously meet the assumption of interval level measurement is presented by N. H. Anderson and by J. Gaito in Heermann, E. and Braskamp L., Readings in Statistics for the Behavioral Sciences, 1970, Prentice-Hall, Inc., pp. 35-66. Means are presented in Table 2 of the paper.

ANOVA Summary Table: Part I: Teaching Methods Items

Source	SS	df	MS	F	p	Geisser-Greenhouse Correction df	p	Variance Component*	ω^2 **
Between									
School	192.60	4	48.15	5.13	.000			.0058	.0210
Discipline	222.07	5	44.41	4.74	.000			.0063	.0237
S x D	454.16	20	22.71	2.42	.001			.0120	.0361
error	6,507.63	694	9.38						
Within									
Typical/Ideal	341.61	1	341.61	123.03	.000	1	.000	.0204	.0109
S x T/I	99.52	4	24.88	8.96	.000	4	.000	.0066	.0028
D x T/I	99.64	5	19.93	7.18	.000	5	.000	.0062	.0028
S x D x T/I	160.15	20	8.01	2.89	.000	20	.000	.0094	.0034
error	1,927.02	694	2.78			694			
Items	3,114.61	22	141.57	114.95	.000	1	.000	.0969	.0994
S x I	153.75	88	1.75	1.42	.006	4	n.s.	.0018	.0015
D x I	589.75	110	5.36	4.35	.000	5	.000	.0171	.0146
S x D x I	720.75	440	1.64	1.33	.000	110	n.s.	.0085	.0058
error	18,803.45	15,268	1.23			694			
T/I x I	276.73	22	12.58	43.03	.000	1	.000	.0170	.0087
S x T/I x I	48.25	88	.55	1.88	.000	4	n.s.	.0018	.0007
D x T/I x I	98.21	110	.89	3.05	.000	5	.01	.0050	.0021
S x D x T/I x I	158.13	440	.36	1.23	.001	110	n.s.	.0025	.0010
error	4,462.70	15,268	.29			694			

* Calculated using $\bar{n} = 24.13$ (i.e. $p^9 (n-1)(r-1) = 694$; $p = 5$, $9 = 6$, $r = 2$; $\therefore n = 24.13$).

** ω^2 calculated separately for total between and total within variances.

(2) A School (5) x Discipline (6) x Grading Standards Items (3) x Typical/Ideal Rating (2) ANOVA with repeated measures on the last two factors was computed to evaluate the magnitude of differences to which the nonparametric concordances are not sensitive. A least-squares solution and the Geisser-Greenhouse correction for df were used. Effects involving the School x Items component were not significant; effects involving the Discipline x Items component were significant.

Means are presented in Table 2 of the paper.

ANOVA Summary Table: Part IIA: Grading Standards Items

Source	SS	df	MS	F	p	Geisser-Greenhouse Correction df	Geisser-Greenhouse Correction p
Between							
School	12.85	4	3.21	1.29	n.s.		
Discipline	8.13	5	1.63	.66	n.s.		
S x D	39.22	20	1.96	.79	n.s.		
error	1,715.28	694	2.47				
Within							
Typical/Ideal	.60	1	.60	1.02	n.s.		
S x T/I	21.28	4	5.32	8.97	.000		
D x T/I	9.62	5	1.92	3.24	.007		
S x D x T/I	25.17	20	1.26	2.12	.003		
error	411.49	694	.59				
Items	245.92	2	122.96	33.28	.000	1	.000
S x I	20.15	8	2.52	.68	n.s.	4	n.s.
D x I	171.95	10	17.19	4.65	.000	5	.000
S x D x I	85.70	40	2.14	.58	n.s.	20	n.s.
error	5,128.53	1,388	3.69			694	
T/I x I	21.04	2	10.52	32.00	.000	1	.000
S x T/I x I	3.11	8	.39	1.18	n.s.	4	n.s.
D x T/I x I	10.13	10	1.01	3.08	.001	5	.01
S x D x T/I x I	19.54	40	.49	1.49	.027	20	n.s.
error	456.16	1,388	.33			694	

C. MEANS: Instructional Models

One-way ANOVAs over disciplines comparing use of experiential, interpersonal, media-based, individualized, and specifically operant modes of instruction were computed. All Fs were statistically significant (ps $<$.01). Item classifications and results are reported in the paper.

Means

Instructional Model	Soc.Sci.	Nat.Sci.	Hum.	Bus.	Educ.	Med./Prof.	Home Ec.	Agri.	Engr.
Operant	1.38	1.38	1.49	1.30	1.78	1.35	1.50	1.31	1.36
Media	1.55	1.68	1.62	1.53	1.81	2.06	1.83	1.74	1.58
Interpersonal	2.23	1.86	2.36	2.14	2.88	2.74	2.73	2.02	1.98
Experiential	1.92	2.03	2.04	1.94	2.55	2.62	2.50	2.15	2.08
Individualized	1.55	1.60	1.68	1.49	1.83	1.69	1.73	1.56	1.57

H. ANOVAs and Means: Size of Teaching Methods Repertoire

A School (5) x Discipline (6) Typical/Ideal (2) ANOVA with repeated measures on the last factor was conducted. The dependent variable, size of teaching repertoire, was the sum of all teaching methods used at least "occasionally". Separate ANOVAs for the typical and for the ideal repertoires were also conducted. Least squares solutions were used in each case.

(1) ANOVA Summary Tables

Source	SS	df	MS	F	p
Between					
School	458.18	4	114.54	4.62	.001
Discipline	800.29	5	160.54	6.46	.000
S x D	953.56	20	47.68	1.92	.009
error	17,197.08	694	24.78		
Within					
Typical/Ideal	2,072.61	1	2,072.61	252.19	.000
S x T/I	202.41	4	50.60	6.16	.000
D x T/I	210.93	5	42.19	5.13	.000
S x D x T/I	350.68	20	17.53	2.13	.003
error	5,703.55	694	8.22		

(2) Typical Repertoire

School	78.10	4	19.52	2.20	n.s.
Discipline	388.78	5	77.76	8.78	.000
S x D	370.42	20	18.52	2.09	.004
error	6,145.32	694	8.85		

(3) Ideal Repertoire

School	582.14	4	145.54	6.03	.000
Discipline	622.44	5	124.49	5.16	.000
S x D	933.79	20	46.69	1.93	.009
error	16,755.29	694	24.14		

Means: Size of Teaching Repertoire *

School	Discipline						
	Typical						
	Soc.Sci.	Nat.Sci.	Hum.	Bus.	Home Ec.	Educ.	$\bar{X}$
UN-L	7.50	6.31	7.33	6.25	9.52	11.06	7.99
UNO	6.95	6.61	8.29	6.03	10.00	9.49	7.63
Kearney	7.30	8.30	8.43	7.14	13.00	8.78	8.45
Chadron	10.00	9.00	8.27	8.00	10.33	9.56	8.98
Union	6.00	5.50	6.50	7.50	11.00	8.57	7.25
$\bar{X}$	7.32	6.81	7.83	6.57	9.97	9.92	
	Ideal						
UN-L	11.91	11.05	10.46	11.89	14.37	15.55	12.27
UNO	13.07	12.09	12.00	8.78	---	14.46	12.13
Kearney	14.40	12.39	12.46	13.86	11.33	13.69	13.08
Chadron	16.50	16.43	11.93	14.63	17.33	16.28	14.66
Union	18.00	11.33	11.63	14.00	17.00	15.14	13.39
$\bar{X}$	12.83	11.86	11.39	11.05	14.51	14.96	

Critical Range, Tukey (a) = 2.25

Ns (Σ = 724)

UN-L	32	64	89	28	27	62
UNO	41	46	70	37	1	41
Kearney	10	23	28	7	3	32
Chadron	4	7	15	8	3	18
Union	1	6	8	4	2	7

* Results are essentially ordinal for disciplines at the various schools. The Disciplines x Typical/Ideal means are presented in the paper.

I: Size of Teaching Repertoire and Faculty Characteristics

One-way ANOVAs across categories of various faculty characteristics with size of teaching repertoire as the dependent variable were performed. The results are summarized below.

F, p

Characteristic	df	Typical	Ideal
School	4,912	3.76, $p < .01$	5.32, $p < .001$
Rank	4,907	.60, n.s.	2.45, $p < .05$
Tenure	1,894	1.11, n.s.	.33, n.s.
% Time with Undergraduates	1,903	1.29, n.s.	1.24, n.s.
Average Number of Students/Semester	4,891	2.93, $p < .03$	2.34, n.s.
Age	5,851	2.67, $p < .03$	1.58, n.s.
Year of Highest Degree	4,897	.39, n.s.	2.10, n.s.

Means: Size of Teaching Repertoire

School

School	Typical	UN-L	UNO	Kearney	Chadron	Union
	$\bar{X}$	7.96	7.70	8.73	9.03	7.43
	Ideal					
	$\bar{X}$	12.32	12.06	13.53	14.82	13.97

Rank

Rank	Ideal	Prof.	Assoc.	Ass't.	Instructor	Other
	$\bar{X}$	12.04	12.70	12.95	12.51	15.73

No. of Students

No. of Students	≤ 25	25-49	50-74	75-100	≥ 100
Typical $\bar{X}$	8.46	8.68	8.00	7.87	6.23

Age

Faculty Age	≤ 25	26-30	31-35	36-40	41-50	51-60
Typical $\bar{X}$	7.88	6.96	7.69	8.27	8.29	8.23

J. ANOVA: Type of Grading Standards Used

Faculty were identified as frequent users of absolute, norm- or criterion-referenced grading standards if they used one of these "frequently" of "almost always" and the others no more then "occasionally." A Faculty Type of Grading Standard Used Frequently (3) x Typical Teaching Methods Items (23) ANOVA with repeated measures on the later factor was performed.

ANOVA SUMMARY TABLE

Source	SS	df	MS	F	p
Between					
Grading Standard	226.84	2	113.42	16,344.67	.000
error	1585.66	562	2.82	40.20	.000
Within					
Items	5983.21	22	271.97	360.84	.000
Gs x I	186.03	44	4.23	5.61	.000
error	9318.70	12364	.75		

MEANS

Item	Type of Grading Standard Used		
	Absolute	Norm Ref.	Crit-Ref.
1	3.07	3.24	2.58
2	3.79	3.78	3.77
3	3.06	2.96	3.39
4	2.70	2.69	3.22
5	1.85	1.92	2.15
7	2.28	2.26	2.47
8	2.50	2.47	2.75
9	2.09	1.91	2.82
10	2.74	2.85	2.92
11	3.25	3.18	3.39
12	1.57	1.44	2.08
13	1.66	1.55	2.09
14	1.47	1.33	1.99
15	1.37	1.29	1.83
16	1.37	1.29	1.79
17	1.15	1.11	1.48
18	1.24	1.24	1.65
19	2.06	2.13	2.42
20	2.10	2.06	2.91
21	1.32	1.32	1.62
22	1.04	1.00	1.11
23	1.14	1.11	1.19
24	1.29	1.29	1.48
N	323	112	130
# $\overline{Xs} > 2.0$	11	10	14

~~Method~~

K. Type of Grading Standard Used and Faculty Characteristics

Chi-square analyses relating type of grading standard typically used and faculty characteristics were performed. The results are summarized below.

Characteristic	χ^2s and ps
School	χ^2 (8) = 20.96, $p < .01$
Rank	χ^2 (8) = 6.84, n.s.
Tenure	χ^2 (2) = 1.90, n.s.
% Time with Undergraduates	χ^2 (2) = 17.98, $p < .001$
Average Number of Students/Semester	χ^2 (8) = 18.05, $p < .03$
Year of Highest Degree	χ^2 (8) = 5.99, n.s.
Sex	χ^2 (2) = 7.60, $p < .03$
Age	χ^2 (10) = 4.76, n.s.

Frequency Distributions

	School	UN-L	UNO	Kearney	Chadron	Union	Σ
Grading Standard	ABS	138	113	36	19	11	317
	Norm.	62	29	9	3	4	107
	Crit.	64	24	22	11	7	128
	Σ	264	166	67	33	22	552

	% Time with Undergraduates	Less than half	More than half	Σ
Grading Standard	ABS	57	260	317
	Norm.	22	85	107
	Crit.	46	80	126
	Σ	125	425	550

Average No. Students/Semester

Ave. No. Students/ Semester		25	25-49	50-74	75-100	100	Σ
Grading Standard	ABS	24	44	80	68	102	318
	Norm.	7	17	20	26	37	107
	Crit	19	27	29	26	24	125
	Σ	50	88	129	120	163	550

Sex		Male	Female	Σ
Grading Standard	ABS	245	65	310
	Norm.	88	19	107
	Crit.	87	40	127
	Σ	420	124	544

L. Umstaadt's Survey Items and Results

Tables 4 and 5 from Umstaadt (pp. 22, 24) identify survey items and means for four types of post-secondary institutions. Table II (pp. 33-34) identify means for faculty in eight academic areas. The last table provides a comparison of the ten most frequently used instructional methods in Umstaadt's (1954) and the 1978 Nebraska survey

Umstaadt reported frequency indices which are arithmetic means of frequency of usage categories based on a four point scale: 0 = Never; 1 = less than once a week; 2 = about once a week; 3 = almost daily. Thus, high numbers indicate frequently used procedures and low numbers indicate infrequently used procedures. The 1978 Nebraska means are calculated from a five point scale: 1 = never; 2 = rarely; 3 = occasionally; 4 = frequently; 5 = almost always. Thus, relative ranks of instructional practices may be compared directly across the two surveys but absolute differences may not be so compared.

Umstaadt (1954

Actual Usage of Most Frequently Used Procedures

Rank	N	Ten State Teachers Colleges (474) $\bar{X}$	5 State Teachers Colleges (154) $\bar{X}$	9 Liberal Arts Colleges (250) $\bar{X}$	4 Universities (193) $\bar{X}$
1	Informal lecture	2.30	2.34	2.35	2.30
2	Discussion	2.06	1.91	1.68	1.79
3	Examinations	1.62	1.56	1.70	1.48
4	Laboratory	1.47	1.03	1.27	1.42
5	Demonstration	1.44	.97	1.04	1.42
6	Ursual Aids	1.27	1.04	.93	.97
7	Anecdote	1.22	1.24	1.19	1.19
8	Student Reports	1.07	.94	.94	.95
9	Coaching	1.00	1.13	.98	1.11
10	Formal lecture	.74	.87	.87	.95

1978 Nebraska (N=970)

Rank (Mdn.)		$\bar{X}$
1	Informal lecture	3.80
2	Audio-Visual Aids	3.24
3	Discussion	3.14
4	Formal lecture	3.01
5	Laboratory	2.90
6	Independent Study	2.84
7	Tutorials	2.63
8	Guest Instructors	2.34
9	Field/Experiental Learning	2.36
10	Discovery/Inquiry Learning	2.25

TABLE 4

Frequency of Use, in Ten State Teachers Colleges and Five State Colleges

Procedures	Ten State Teachers Colleges N: 474 Last Semester	Ten State Teachers Colleges N: 474 Ideal Conditions	Five State Colleges N: 134 Last Semester	Five State Colleges N: 134 Ideal Conditions
1. Formal lecture	0.74	0.71	0.87	0.71
2. Informal lecture	2.30	2.20	2.34	2.20
3. Discussion	2.06[a]	2.25[a]	1.91	2.26
4. Laboratory	1.47[1]	1.87	1.03[1]	1.69
5. Demonstration	1.44[2]	1.79	0.92[2]	1.39
6. Parable	0.78	0.99	0.75	0.93
7. Anecdote	1.22	1.30	1.24	1.28
8. Field trips	0.52[b 3]	1.20[b]	0.28[c 3]	1.04[c]
9. Visual aids	1.27[4]	1.82[4]	1.04[c]	1.70[c]
a. Sound films	0.68[f]	1.40[f]	0.64	1.41
b. Silent films	0.24	0.92	0.28	0.90
c. Film strips	0.30	1.16	0.13	0.85
d. Slides	0.37	1.18	0.31	1.22
e. Charts	1.08	1.75	0.85	1.35
f. Other classroom visual aids	1.27	1.67	0.86	1.35
10. Auditory aids	0.39	1.00	0.26[g]	1.00[g]
a. Live radio broadcasts	0.14	0.79	0.15	0.87
b. Recorded radio broadcasts	0.09	0.82	0.16	0.87
c. Other recordings	0.38	0.91	0.38	1.05
11. Direct conversational method	0.22	0.40	0.02	0.07
12. Tutorial	0.73[h]	1.21[h]	0.64	1.22
13. Coaching	1.00	1.30	1.13	1.30
14. Forum	0.47	0.93	0.37	0.80
15. Panel	0.44	0.91	0.39	0.91
16. Debate	0.10	0.40	0.07	0.38
17. Examinations	1.62	1.83	1.56	1.44
18. Student reports	1.07	1.30	0.94	1.24
19. Dramatization	0.13	0.41	0.12	0.51
20. Construction	0.48[4]	0.78	0.17[4]	0.59
21. Exhibitions	0.54[5]	0.92	0.26[5]	0.71
22. Concert	0.07	0.20	0.07	0.28
23. Recital	0.10	0.20	0.00	0.15
24. Written reports or term papers	1.00	1.13	1.00	1.22
25. Guest instructors	0.40	1.00	0.29	0.96
26. Use of local people	0.34	0.91	0.22	0.80
27. Use of other local resources	0.38	0.74	0.27	0.58

Critical ratios, fall semester 1948 versus "ideal conditions": a-a, 3.17; b-b, 16.19; c-c, 6.90; d-d, 8.46; e-e, 3.19; f-f, 14.43; g-g, 3.50; h-h, 8.00.
Critical ratios, teachers colleges versus state colleges: 1-1, 2.73; 2-2, 3.92; 3-3, 3.43; 4-4, 4.15; 5-5, 3.10.

TABLE 5

Frequency of Use, in Nine Liberal Arts Colleges and Four Universities

Procedures	Nine Liberal Arts Colleges N: 250 Last Semester[a]	Nine Liberal Arts Colleges N: 250 Ideal Conditions	Four Universities N: 193 Last Semester	Four Universities N: 193 Ideal Conditions
1. Formal lecture	0.87	0.81	0.95	0.91
2. Informal lecture	2.35	2.26	2.30	2.38
3. Discussion	1.68	1.96	1.79	2.11
4. Laboratory	1.27	1.57	1.42	1.83
5. Demonstration	1.04	1.35	1.42	1.65
6. Parable	0.74	0.96	0.83	0.98
7. Anecdote	1.19	1.30	1.19	1.22
8. Field trips	0.31	0.96	0.34	0.97
9. Visual aids	0.93	1.61	0.97	1.46
a. Sound films	0.35	1.17	0.51	1.14
b. Silent films	0.10	0.76	0.21	0.78
c. Film strips	0.16	0.96	0.29	0.93
d. Slides	0.29	1.06	0.32	0.97
e. Charts	1.05	1.33	0.87	1.22
f. Other classroom visual aids	0.93	1.36	0.73	1.18
10. Auditory aids	0.31	0.85	0.30	0.60
a. Live radio broadcasts	0.12	0.70	0.12	0.64
b. Recorded radio broadcasts	0.08	0.71	0.14	0.70
c. Other recordings	0.34	0.93	0.21	0.73
11. Direct conversational method	0.39	0.51	0.16	0.27
12. Tutorial	0.71	1.23	0.71	1.37
13. Coaching	0.98	1.17	1.11	1.32
14. Forum	0.40	0.77	0.39	0.75
15. Panel	0.40	0.84	0.35	0.77
16. Debate	0.13	0.41	0.07	0.37
17. Examinations	1.70	1.72	1.48	1.61
18. Student reports	0.94	1.23	0.95	1.26
19. Dramatization	0.17	0.36	0.11	0.33
20. Construction	0.22	0.52	0.37	0.53
21. Exhibitions	0.32	0.68	0.42	0.72
22. Concert	0.16	0.23	0.01	0.09
23. Recital	0.14	0.29	0.02	0.08
24. Written reports or term papers	0.96	1.12	0.96	1.13
25. Guest instructors	0.31	0.92	0.39	0.96
26. Use of local people	0.32	0.82	0.37	0.89
27. Use of other local resources	0.23	0.62	0.21	0.55

[a] Fall semester, 1948–49.

Table 11

Comparison of Frequency Indexes of Teachers of Language Arts, Foreign Languages, Mathematics, Science, Social Studies, Education, Business Administration, and Fine Arts

Procedures	L.A.[a] N: 142	For. Lang.[b] N: 34	Math. N: 53	Sci. N: 119	Soc. Stud.[c] N: 142	Educ. N: 132	Bus. Adm. N: 80	Fine Arts N: 60
1. Formal lecture	0.80	0.50	0.53	1.10	1.02	0.76	0.74	0.52
2. Informal lecture	2.33	1.76	2.46	2.44	2.47	2.25	2.32	2.27
3. Discussion	1.98	1.47	2.00	1.53	1.92	2.35	1.65	2.03
4. Laboratory	1.02	1.20	1.24	2.28	0.43	1.27	1.71	1.07
5. Demonstrations	0.82	1.07	1.48	1.75	0.76	1.32	1.54	1.78
6. Parable	0.82	0.69	0.64	0.79	0.92	0.69	0.83	0.84
7. Anecdote	1.17	1.16	0.63	1.14	1.36	1.43	0.99	1.14
8. Field trips	0.19	0.11	0.00	0.42	0.31	0.62	0.37	0.38
9. Visual aids	0.76	0.92	0.83	1.52	0.92	1.14	1.09	1.33
a. Sound films	0.36	0.44	0.06	0.77	0.43	0.84	0.31	0.38
b. Silent films	0.09	0.17	0.00	0.20	0.11	0.30	0.05	0.20
c. Film strips	0.10	0.09	0.06	0.23	0.14	0.47	0.11	0.21
d. Slides	0.13	0.32	0.06	0.75	0.27	0.35	0.07	0.18
e. Charts	0.70	0.69	0.62	1.72	1.13	1.25	0.81	0.86
f. Other classroom visual aids	0.81	0.96	1.35	1.35	0.92	1.09	1.16	1.33
10. Auditory aids	0.51	0.70	0.00	0.19	0.23	0.29	0.19	1.24
a. Live radio broadcasts	0.28	0.60	0.00	0.01	0.21	0.13	0.05	0.20
b. Recorded radio broadcasts	0.32	0.04	0.00	0.00	0.14	0.11	0.09	0.12
c. Other recordings	0.58	0.97	0.00	0.09	0.12	0.23	0.14	0.21

Procedures	L.A.[a] N: 142	For. Lang.[b] N: 34	Math. N: 53	Sci. N: 119	Soc. Stud.[c] N: 142	Educ. N: 132	Bus. Adm. N: 80	Fine Arts N: 60
11. Direct conversational method	0.33	2.53	0.03	0.18	0.00	0.02	0.02	0.16
12. Tutorial	0.83	0.85	1.04	0.67	0.37	0.66	0.69	0.92
13. Coaching	1.08	1.40	1.78	1.15	0.95	0.69	1.00	1.00
14. Forum	0.47	0.18	0.18	0.18	0.60	0.69	0.29	0.43
15. Panel	0.50	0.31	0.20	0.10	0.52	0.73	0.22	0.35
16. Debate	0.14	0.00	0.04	0.04	0.15	0.13	0.06	0.19
17. Examinations	1.68	2.14	1.70	1.76	1.60	1.35	1.56	1.61
18. Student reports	1.19	0.90	0.78	0.69	1.14	1.40	0.70	0.85
19. Dramatizations	0.34	0.55	0.00	0.03	0.04	0.13	0.04	0.13
20. Construction	0.11	0.17	0.50	0.41	0.10	0.38	0.48	0.52
21. Exhibitions	0.33	0.32	0.27	0.32	0.13	0.46	0.65	1.02
22. Concert	0.05	0.25	0.00	0.00	0.02	0.01	0.00	0.76
23. Recital	0.08	0.19	0.00	0.01	0.00	0.02	0.00	0.92
24. Written reports or	1.31	0.76	0.52	0.72	1.01	1.24	0.75	0.84
25. Guest instructors	0.25	0.07	0.02	0.25	0.41	0.70	0.18	0.48
26. Use of local people	0.16	0.25	0.02	0.22	0.41	0.43	0.47	0.30
27. Use of local resources	0.17	0.15	0.00	0.80	0.18	0.26	0.18	0.31

[a] English [b] Ancient and Modern
[c] Social studies here include history, government, economics, sociology, and philosophy.

University of Nebraska

INSTRUCTIONAL METHODS SURVEY

This survey is sponsored by the Fund for the Improvement of Post-Secondary Education, Department of Health, Education and Welfare.

DIRECTIONS FOR MARKING ANSWERS

- Use a soft lead pencil only (No. 2 or softer). (Do not use ink.)
- Make heavy black marks that fill the circle completely.
- Erase clearly any answer you wish to change.
- Make no stray marks on this answer sheet.
- Mark only one answer for each question. Multiple marks cannot be counted.

EXAMPLE

○○✓○○ WRONG ○○○○⊗ WRONG

○○●○○ WRONG ○○○●○ RIGHT

FACULTY SURVEY

I. INSTRUCTIONAL METHODS

The following is a list of instructional methods employed in higher education. A brief description of each method is provided. Please rate each method according to how much you typically use it, limiting your evaluations to your experience with undergraduate education at this institution during the last four years. Then rate each method according to how much you would ideally use it.

	TYPICAL USAGE					IDEAL USAGE				
	Never	Rarely	Occasionally	Frequently	Almost Always	Never	Rarely	Occasionally	Frequently	Almost Always
1. Formal Lecture. The instructor spends all of the class time presenting information to students in a one-way communication process. The lecture may include demonstrations.	○	○	○	○	○	○	○	○	○	○
2. Informal Lecture. A more conversational method than the formal lecture. It is often interspersed with questions, comments, and brief discussions.	○	○	○	○	○	○	○	○	○	○
3. Discussion. An extended exchange of ideas between student and instructor and/or student and student in the presence of the entire class.	○	○	○	○	○	○	○	○	○	○
4. Laboratory. Student application, manipulation, practice, research, or experimental work in a laboratory, workshop, or other applied setting.	○	○	○	○	○	○	○	○	○	○
5. Field Trip. A planned visit to a factory, plant, farm, school, museum, art exhibit and the like.	○	○	○	○	○	○	○	○	○	○
6. Direct Conversational Method (language only). The teaching of a language by actually using it through the speech-hearing approach.	○	○	○	○	○	○	○	○	○	○
7. Guest Instructors. Colleagues and others are invited to aid in instruction through lectures, demonstrations, or discussions.	○	○	○	○	○	○	○	○	○	○
8. Tutorials. The instructor meets with students individually or in small groups to provide remedial aid.	○	○	○	○	○	○	○	○	○	○
9. Peer-Assisted Instruction. Students teach and learn from each other in small groups. Sometimes the students are divided into pairs and are given or choose a specific assignment for each class period.	○	○	○	○	○	○	○	○	○	○
10. Independent Study. This involves projects planned, directed, and conducted by students, either individually or in small groups. Study is supervised by the instructor and the end product is often a paper or some other type of report.	○	○	○	○	○	○	○	○	○	○
11. Audio-Visual Aids. The instructor uses models, exhibits, films, slides, film strips, videotapes, recordings, etc.	○	○	○	○	○	○	○	○	○	○
12. Role-Playing. This involves setting up a more or less unstructured situation in which students behavior is improvised to fit in with their conceptions of the part or character they've been assigned.	○	○	○	○	○	○	○	○	○	○
13. Simulation/Gaming. Instruction utilizes devices or procedures which attempt to reproduce in a controlled fashion the real world. This is a more highly structured method than role-playing. Simulation techniques are available commercially or may be devised by the instructor.	○	○	○	○	○	○	○	○	○	○
14. Contingency Contracting. The final course grade is based on a written agreement or "contract" between the instructor and student which specifies the grade desired, tasks, and the performance level which must be met.	○	○	○	○	○	○	○	○	○	○
15. Programmed Instruction. The material to be learned is organized into small sequential steps, called "frames." Basic concepts are learned before higher order ones, and immediate feedback is provided. The student controls the rate of presentation.	○	○	○	○	○	○	○	○	○	○
16. Modular Instruction. Similar to programmed instruction, but with fewer mechanistic features. Uses larger units of study than the "frames" of programmed instruction. The essential feature is the organization of material into modules which are self-contained. Modules may be completed in sequence, or students may choose from several modules at any particular time.	○	○	○	○	○	○	○	○	○	○
17. Keller Plan. (Personalized System of Instruction). A self-paced, student-tutored, mastery-oriented instructional design. Course content is broken down into small segments which are learned on a step-by-step basis. Instructor-prepared written materials often supplement the textbook. A few lectures may be given, but they are used primarily for stimulation and motivation. Study guides state objectives for each unit, suggest study procedures and list study questions. Each unit must be mastered before progressing to the next.	○	○	○	○	○	○	○	○	○	○

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	TYPICAL USAGE					IDEAL USAGE				
	Never	Rarely	Occasionally	Frequently	Almost Always	Never	Rarely	Occasionally	Frequently	Almost Always
18. **Individually Prescribed Instruction**. The student is given a pre-test to determine which objectives may already have been mastered. A prescription is then written which specifies the units which must be mastered to complete the course.	○	○	○	○	○	○	○	○	○	○
19. **Discovery/Inquiry Learning**. Uses the scientific method as its model. Students are given practice in recognizing problems, formulating hypotheses, gathering and interpreting data, and drawing conclusions. The instructor is a co-learner rather than an authority, although he/she may suggest lines of inquiry.	○	○	○	○	○	○	○	○	○	○
20. **Field or Experiential Learning**. A blending of classroom experiences with practical experiences as in action learning, apprenticeships, internships, practica, field experiences, etc.	○	○	○	○	○	○	○	○	○	○
21. **Auto-Tutorial**. This draws heavily on the use of various media as well as some of the principles of programmed instruction. Instructions are given for a wide range of learning activities. Students follow these instructions at their own rate, usually in specially arranged classes containing textbooks, lab manuals, specimens, slides, film strips, etc.	○	○	○	○	○	○	○	○	○	○
22. **Computer-Managed Instruction**. A computer performs diagnostic testing and prescribes learning experiences based on this test performance. Learning experiences involve relevant texts, articles, audio-visual aids, etc. to which the student is referred by the computer.	○	○	○	○	○	○	○	○	○	○
23. **Computer-Assisted Instruction**. The computer acts in a tutorial manner as the student moves through a self-paced program of instruction. Teaching materials are presented directly through two-way communication with the computer, the communication taking place at a computer terminal or teletype machine.	○	○	○	○	○	○	○	○	○	○
24. **Television**. Course material is presented primarily via television. The student may watch in class, at home, or at a media center.	○	○	○	○	○	○	○	○	○	○

II. GRADING METHODS

The following is a list of grading practices employed in higher education. The first three are standards according to which students may be evaluated. The remainder are the specific tasks or behaviors which may be evaluated. A brief description of each is provided. Please rate each method according to how much you typically use it, limiting your evaluations to your experience with undergraduate education at this institution during the last four years. Then rate each method according to how much you would ideally use it.

	TYPICAL USAGE					IDEAL USAGE				
	Never	Rarely	Occasionally	Frequently	Almost Always	Never	Rarely	Occasionally	Frequently	Almost Always
A. Standards for Evaluation										
25. **Absolute Standards**. Student performance is evaluated by comparison to a fixed standard determined by the instructor. Examples of absolute standards would include things like percentage of items correct, or the qualitative assessment of an essay.	○	○	○	○	○	○	○	○	○	○
26. **Norm-Referenced Grading**. This method is based on the assumption that student performance should be distributed according to a "normal", bell-shaped curve or some variation of it. Grades are distributed proportionately to the class performance distribution.	○	○	○	○	○	○	○	○	○	○
27. **Criterion-Referenced Grading**. The basic feature here is the concept of mastery. This method involves a very complete and explicit behaviorally based statement of the course objectives. Evaluation determines whether or not the student has attained these objectives.	○	○	○	○	○	○	○	○	○	○
B. Tasks to be Evaluated										
28. **Multiple Choice Exams**. Objectively scored exams in which the student chooses one answer from among several alternatives. This method includes true/false exams as well as matching exercises.	○	○	○	○	○	○	○	○	○	○
29. **Fill-In-The-Blank Exams**. Students are required to complete a statement with one or several words.	○	○	○	○	○	○	○	○	○	○
30. **Recognition Exams**. Students are presented with visual and/or auditory stimuli and required to identify them. Stimuli might be presented on slides, transparencies, videotapes, etc.	○	○	○	○	○	○	○	○	○	○
31. **Short Essay Exams**. This method requires brief answers to a question or questions. It may involve defining key concepts or principles.	○	○	○	○	○	○	○	○	○	○
32. **Long Essay Exams**. The students must write a response which demonstrates ability to organize and integrate a substantial amount of material.	○	○	○	○	○	○	○	○	○	○
33. **Book Reports**. The student reads a book of relevance to the course and prepares a written or oral report on it.	○	○	○	○	○	○	○	○	○	○
34. **Term or Research Papers**. Written reports prepared by the student after special study of a topic or problem of significance for the course.	○	○	○	○	○	○	○	○	○	○

DO NOT WRITE HERE

	TYPICAL USAGE					IDEAL USAGE				
	Never	Rarely	Occasionally	Frequently	Almost Always	Never	Rarely	Occasionally	Frequently	Almost Always
35. Public Performances. Students present or display the results of learning activities in the form of a concert, recital, or exhibition given outside of the classroom.	○	○	○	○	○	○	○	○	○	○
36. Class Presentations. The student is required to display the results of learning activities to the rest of the class. This could take the form of a speech or debate, panel discussion, cooking demonstration, oral presentation of research, etc.	○	○	○	○	○	○	○	○	○	○
37. Oral Exams. The student responds orally to questions administered by an instructor or team of instructors.	○	○	○	○	○	○	○	○	○	○
38. Discussion. Students are expected to take part in any class discussions and are evaluated on the quality of their participation.	○	○	○	○	○	○	○	○	○	○
39. Attendance. Students are evaluated on the basis of class attendance.	○	○	○	○	○	○	○	○	○	○
40. Lab Reports. Students are required to conduct laboratory investigations and submit a written report detailing their procedures and results.	○	○	○	○	○	○	○	○	○	○
41. Journals. Students keep a written log of their thoughts, feelings, and experiences while taking the course.	○	○	○	○	○	○	○	○	○	○
42. Problems. The student attempts to work through assigned problems and arrive at solutions to them.	○	○	○	○	○	○	○	○	○	○

III. GENERAL INFORMATION

43. Where do you presently teach?
○ UN-L ○ UNO ○ Kearney ○ Chadron ○ Doane ○ College of St. Mary's

44. What is your academic rank?
○ Professor ○ Associate Professor ○ Assistant Professor ○ Instructor ○ Other

45. Are you tenured?
○ Yes ○ No

46. How much of your time at this institution during the last four years has been involved with undergraduate instruction?
○ less than half ○ more than half

47. How much of your time at this institution during the last four years has been involved with graduate instruction?
○ less than half ○ more than half

48. What is the average total number of students you teach per semester?
○ fewer than 25 ○ 25-49 ○ 50-74 ○ 75-100 ○ more than 100

49. What is the most advanced academic degree you have earned?
○ BA/BS ○ MA/MS ○ MBA/MFA ○ A.B.D. ○ EdD/PhD ○ Other

50. When did you earn this degree?
○ before 1955 ○ 1955-1964 ○ 1965-1970 ○ 1971-1974 ○ after 1974

51. Please indicate your sex.
○ male ○ female

52. Please indicate your age.
○ under 25 ○ 26-30 ○ 31-35 ○ 36-40 ○ 41-50 ○ 51-60 ○ over 60

PLEASE TURN PAGE FOR FINAL ITEM

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53. What is the academic discipline or general field in which you teach? Please see below for the appropriate code, enter the code numbers in the boxes to the right, and fill in the appropriate circles.

CODE		
0	0	0
1	1	1
2	2	2
3	3	3
4	4	4
5	5	5
6	6	6
7	7	7
8	8	8
9	9	9

THANK YOU

Code for Discipline/Major

100 SOCIAL SCIENCE
101 Anthropology
102 Ethnic Studies
103 Political Science
104 Psychology
105 Sociology
110 Criminal Justice
111 Public Administration
112 Social Welfare

200 NATURAL SCIENCES
201 Astronomy
202 Biology
203 Botany
204 Chemistry
205 Geography
206 Geology
207 Life Sciences
208 Physics
210 Computer Science
211 Mathematics
212 Statistics

300 HUMANITIES, FINE ARTS, LANG.
301 Classics
302 English
303 History
304 Philosophy
310 Architecture
311 Art
312 Music
313 Theater Arts
320 Broadcasting
321 Journalism
322 Library Science
323 Modern Language
324 Speech/Communication

400 BUSINESS
401 Accounting
402 Business Law
403 Decision Sciences
404 Economics
405 Finance
406 Management
407 Marketing
410 Secretarial

500 ENGINEERING
501 Agricultural
502 Chemistry
503 Civil/Environmental
504 Construction Management
505 Electrical
506 Mechanical

600 HOME ECONOMICS
601 Food & Nutrition
602 Human Devel. & Family
603 Textiles, Clothing, Design

700 AGRICULTURE
701 Agronomy
702 Animal Science
703 Entomology
704 Food Science/Technology
705 Forestry
706 Horticulture
707 Plant Pathology
708 Wildlife Science
709 Veterinary Science

800 EDUCATION
801 Administration
802 Adult & Continuing Ed.
803 Agricultural Ed.
804 Business Ed.
805 Ed. Psychology
806 Elementary Ed.
807 Industrial Ed.
808 Physical Ed. or Recreation
809 Secondary Ed.
810 Special Ed.

900 MEDICAL/PROFESSIONAL
901 Medical Tech.
902 Occupational Therapy
903 Physical Therapy
904 Pre-Dentistry
905 Pre-Law
906 Pre-Medicine
907 Pre-Nursing
908 Radiology
909 Speech Pathology

999 Other

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